

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
8 December 2005 (08.12.2005)

PCT

(10) International Publication Number
WO 2005/116786 A2

(51) International Patent Classification⁷: G05B 19/418

(21) International Application Number:
PCT/JP2005/009588

(22) International Filing Date: 19 May 2005 (19.05.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2004-152504 21 May 2004 (21.05.2004) JP

(71) Applicant (for all designated States except US): MAT-SUSHITA ELECTRIC INDUSTRIAL CO., LTD.
[JP/JP]; 1006, Oaza Kadoma, Kadoma-shi, Osaka,
5718501 (JP).

(72) Inventors; and

(75) Inventors/Applicants (for US only): MAENISHI, Yasuhiro. YOSHIDA, Ikuo.

(74) Agents: TAKAMATSU, Takeshi et al.; Eikoh Patent Office, 13th Floor, ARK Mori Building, 12-32, Akasaka 1-chome, Minato-ku, Tokyo 1076013 (JP).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

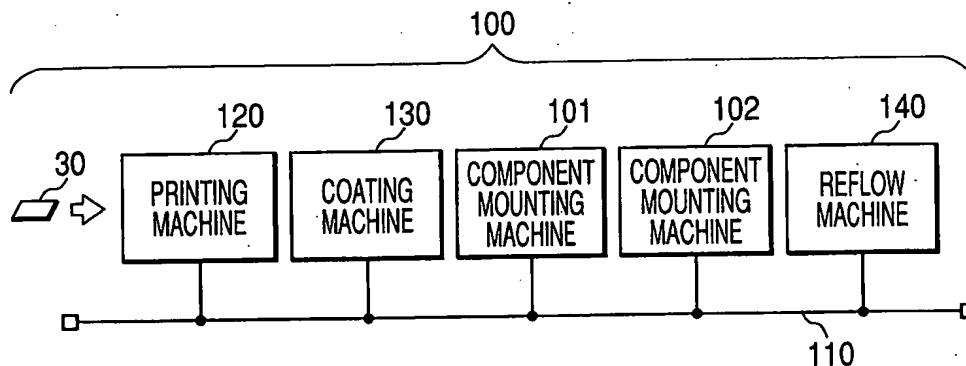
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: LINE BALANCE CONTROL METHOD, LINE BALANCE CONTROL APPARATUS, AND COMPONENT MOUNTING MACHINE



(57) Abstract: To provide a line balance control method, a line balance control apparatus, and a component mounting machine, which do not require a higher-level device. A production line 100 is equipped with a printing machine 120, a coating machine 130, a component mounting machine 101, a component mounting machine 102, and a reflow machine 140, and they are connected through a communication line 110, respectively. In addition, a line balance control device, which is equipped with possibility inquiring means which makes an inquiry of whether or not it is possible to mount components to be allocated, among the components to be mounted, to the component mounting machines 101, 102, possibility obtaining means which obtains a response to the inquiry in the possibility inquiring means, and allocating means which allocates components to be mounted, to each component mounting machine 101, 102, in such a manner that mounting time at each component mounting machine is equalized, on the basis of the response obtained in the possibility obtaining means, is disposed in a device which configure the production line 100.

WO 2005/116786 A2